

REMARKS

This application has been carefully reviewed in view of the above-referenced Office Action, and reconsideration is requested in view of the following remarks.

Interview Summary

The undersigned spoke with Examiner Chin and Supervisory Primary Examiner Koenig on June 2, 2010 regarding the present application. The undersigned explained that Fig. 2B contains an error as has been corrected above. The undersigned further explained that in claim 1, both the forward and reverse indices cause playback of the second file in either the forward or reverse order respectively. In other words, there is only one second file that is used by both the forward and reverse indices to effect trick play, as indicated by the explicit use of the antecedent basis of "the second file" in the claim language. It was agreed that this meaning is to be interpreted provided it is documented as such in this response, and the above is intended to provide such documentation. It was further agreed that if upon further study this discussion does not satisfy the Examiners, they will call the undersigned prior to issuance of another Office Action. The Office is reminded that this is a sixth office action and is a new action after the undersigned client has gone to the expense of responding to five office actions and preparation of an appeal brief. It is submitted that a cooperative effort to final resolution is desirable and the undersigned appreciates the Examiners' cooperative efforts in the interview to this end.

The undersigned appreciates the courtesies extended during this interview and trusts that the Examiners are agreeable to a further interview if needed in order to avoid returning this case to appeal and in order to expedite prosecution of this case.

Regarding the Rejection Under 35 U.S.C. §102

Claims 1-4, 6, 8, 19-22, 24 and 26 were rejected as anticipated by Applicant Admitted Prior Art (AAPA). The undersigned addressed this issue with the Examiners in the above interview. With the correction of Fig. 2B for consistency, it is now believed clear that there is no anticipation since the indices of Fig. 2 each effect trick play by use of separate trick play files - one for fast forward 80 and one for fast reverse 78. Hence, since both indices utilize a single

trick play file (the second file) in all claims at issue, it is clear that there is no anticipation. Hence, reconsideration and allowance are respectfully requested.

Regarding the Rejections Under 35 U.S.C. § 103

Regarding claims 5, 7, 9-18, 23, 25 and 27:

Claims 5, 7, 9-18, 23, 25 and 27 were rejected as obvious over the AAPA in view of Tiwari of record. Applicant respectfully traverses this rejection as follows:

As discussed above, the AAPA does not in fact disclose that which is asserted to be admitted in the Office Action. In view of this failure, the combination proposed fails to establish *prima facie* obviousness for failure to properly identify all claim features in the arrangement claimed since Tiwari fails to provide the teaching lacking in the AAPA.

Further, with regard to Tiwari, as noted in the Appeal Brief, Applicants reiterate the position that the Tiwari reference strongly teaches against use of the types of trick play files claimed. Examiner Koenig indicated that he recalled this argument from the Appeal Brief, but was not impressed.

The Examiners are respectfully reminded that per MPEP 2341.01 V the proposed modification cannot render the prior art unsatisfactory for its intended purpose. "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)". The MPEP at 2145 X 2 explicitly states that "**References Cannot Be Combined Where Reference Teaches Away from Their Combination**" and "It is improper to combine references where the references teach away from their combination."

The Patent Office is further respectfully reminded that "if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." (MPEP § 2143.01, V citing In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984), emphasis added). Further, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to

render the claims *prima facie* obvious. (MPEP § 2143.01, VI citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)).

Tiwari teaches that use of trick play files containing only I frames selected from the main content file causes “jerky picture quality because of the uneven spacing of the I-picture spacing” (col. 1, lines 43-46). This in fact precisely the problem Tiwari seeks to solve. He solves this problem by selecting every n^{th} picture and converting those pictures (if B or P pictures) to an I picture. This collection of I pictures is then used for a smooth trick play mechanism since every n^{th} picture is selected rather than a sequence of I frames from the content (which are not uniformly spaced).

In the Advisory Action, the Examiner erroneously asserts without any technical support that “it is reasonable to expect that the n^{th} frame may be an I frame”, but the claims call for “storing the inter-coded and the intra-coded frames of the content in a first file; storing a duplicate of the intra-coded frames of the content in a second file” (emphasis added), thus the file structure defined is not consistent with Tiwari. Moreover, one cannot overlook the fact that the Examiner’s interpretation is directly contrary to Tiwari’s teachings regarding the problem he seeks to solve, would render Tiwari unsatisfactory for its intended purpose by failing to solve the problem addressed by Tiwari and would dramatically change the principle of operation of the reference – and in doing so, destroy the intended function of Tiwari. Hence, use of Tiwari in conjunction with a trick play file made of I frames from the content would not only fly in the face of Tiwari’s teachings of the disadvantages of such I-frame trick play files, but would in fact destroy Tiwari’s main function as well as alter the method of operation in a destructive manner. Ergo, the proposed modification is further improper as discussed above and *prima facie* obviousness has not been established.

As a result, not only does the AAPA fail to disclose that which is asserted, but Tiwari teaches against Appellants’ file arrangement and Zdepski’s trick play files. Hence *prima facie* obviousness has not been established.

Regarding claims 1-18:

Claims 1-18 were rejected as obvious over the combination of Lev with Keller of record. Applicant respectfully traverses the rejection.

Regarding the Lev reference, Lev utilizes two files where one contains intracoded frames and the other contains the inter-coded frames. By separation of the files as discussed, storage is optimized.

The Keller reference, on the other hand, appears to use the both fast forward and fast reverse files as shown in Fig. 24, 25, and 26A. But note that they are stored as scaled I frames plus B and P frames generated for the specific speed-up factors desired (col 30, lines 26-47) along with freeze frames (valid splice points – in points and out points for a play list). In trick play mode, freeze frames are produced and streamed along with B and P frames. Keller even suggests more trick mode files be stored – one for each desired speed-up factor. Thus, the stored I frames in the trick mode files are not “duplicates of the I frames” as claimed, but instead are scaled versions of the I frames along with some version of B and P frames and freeze frames. (The claims have been clarified by use of the term “duplicate” throughout.)

Keller therefore creates the trick play files specifically for smooth play at a particular speedup factor, and uses scaling of the I frames to reduce the size of the I frames.

As a result, the combination proposed by the Office of Lev with Keller results not in the claims as presented, but rather, apparently would require that one store a first file with intra-coded frames, one file with inter-coded frames, and at least one further file of trick play frames with the scaling of the I frames and other features taught by Keller. In the absence of all three files, one would again be destroying the function of either Keller or Lev. In any event, one fails to meet the claim feature of having two trick play indices, one for forward and one for reverse, that utilize the file containing the intra-coded frames, as well as having one file with both intra-coded and inter-coded frames.

In view of the above, it is submitted that the Office has failed to establish *prima facie* obviousness. Reconsideration and allowance is respectfully requested.

Regarding claims 19-27 and 44:

Claims 19-27 and 44 were rejected as obvious in view of the combination of Boyle, Tiwari and Lev. Applicant respectfully traverses the rejection.

Claims 19 and 44 were amended as discussed in the above interview so that all claims call for a first file with inter-coded and intra-coded frames and a second file with duplicates of the intra-coded frames. Claim 44 was further amended as offered by the undersigned to comply with Director Kappos' memorandum of January 26, 2010.

The Boyle reference appears to use the full video stream plus an index. All embodiments appear to use a single full file and index to implement both trick play and conventional play. Boyle, instead, uses indices to the file containing both intra-coded and inter-coded frames for this purpose.

The Tiwari reference, as previously noted, creates a special trick play file with artificially created intra-coded frames for smooth trick play playback. As before, the use of Tiwari's teachings is directly contradictory to use of intra-coded frames of video as claimed for trick play.

The Lev reference, as discussed above, uses intra-coded frames in a separate file for trick play, but again, combination with Tiwari is impermissible in that the combination would destroy the function of the Tiwari reference in order to meet the claim features. Any combination that includes Tiwari would appear to require that his teachings of a special trick play file be utilized to avoid destruction of his prime objective – reduction of jitter in trick play playback.

The Office Admits at page 14, first paragraph that Boyle and Tiwari do not explicitly teach “storing the inter-coded frames of the content in a first file and storing the intra-coded frames of the content in a second file and where, commands received at the television service provider from a subscriber terminal requesting trick play modes are implemented by retrieving inter-coded frames from the first file using either the forward or the reverse indices”. The Office looks to the Lev reference to supply these teachings. The Office then proceeds to explain how it believes the Lev reference to supply these teachings. However, one must analyze the claim language to recognize that the claims call for “storing the inter-coded frames of the content in a first file” and that the last sub-paragraph of the claim calls for retrieving the inter-coded frames from the first file using either the forward or reverse indices (emphasis added).

The Examiner's attention is again drawn to the fact that the claim calls for use of the inter-coded frames of the content to be directly used to create trick play. However, Tiwari explicitly wishes to avoid the use of the content's inter-coded frames directly so as to not produce jerky trick play and therefore creates another set of pictures for trick play. Hence, again the proposed combination destroys the intended function of the Tiwari reference. Per MPEP 2143.01, this is improper and *prima facie* obviousness has not been established. In view of this error, claims 19-27 and 44 are improperly rejected. Reconsideration and allowance are respectfully requested at an early date.

The Examiner's attention is further directed to the Appeal Brief which addresses this rejection as follows, and Applicant stands by this analysis:

"The Examiner admits at page 14, first paragraph that Boyle and Tiwari do not explicitly teach "storing the inter-coded frames of the content in a first file and storing the intra-coded frames of the content in a second file and where, commands received at the television service provider from a subscriber terminal requesting trick play modes are implemented by retrieving inter-coded frames from the first file using either the forward or the reverse indices". The Examiner looks to the Lev reference to supply these teachings. The Examiner then proceeds to explain how he believes the Lev reference to supply these teachings. However, one must analyze the claim language to recognize that the claims call for "storing the inter-coded frames of the content in a first file" and that the last sub-paragraph of the claim calls for retrieving the inter-coded frames from the first file using either the forward or reverse indices (emphasis added).

"The Board's attention is again drawn to the fact that the claim calls for use of the inter-coded frames of the content to be directly used to create trick play. However, Tiwari explicitly wishes to avoid the use of the content's inter-coded frames directly so as to not produce jerky trick play and therefore creates another set of pictures for trick play. Hence, again the proposed combination destroys the intended function of the Tiwari reference. Per MPEP 2143.01, this is improper and *prima facie* obviousness has not been established. In view of this error, claims 19-27 and 44 are improperly rejected. Reversal and allowance are respectfully requested at an early date."

In view of all of the above, it is submitted that these claims as amended are in condition for allowance and such is respectfully requested at an early date.

In view of the amendment of the independent claims as discussed, several of the dependent claims have been amended for consistency. Reconsideration and allowance of all claims are respectfully requested.

Concluding Remarks

The undersigned additionally notes that many other distinctions exist between the cited art and the claims. However, in view of the clear distinctions pointed out above, further discussion is believed to be unnecessary at this time. Failure to address each point raised in the Office Action should accordingly not be viewed as accession to the Examiner's position or an admission of any sort. Applicants reserve the right to make further arguments favoring patentability of any claim at a future date.

Interview Request

In view of this communication, all claims are now believed to be in condition for allowance and such is respectfully requested at an early date. If further matters remain to be resolved, the undersigned respectfully requests the courtesy of a further interview. It is noted that prosecution of the current application has been re opened after appeal. The undersigned submits that this is indicative that the prior rejections were inadequate and at least certain of the Applicant's positions have been accepted. In order to avoid returning this application to appeal and save the trouble and expense of further appeal, the undersigned respectfully requests a further interview to advance prosecution and looks forward to working with Examiner Chin and SPE Koenig toward resolution of any outstanding issues and expedite prosecution of the present application. Hence, the courtesy of a telephone call to expedite further prosecution is earnestly solicited.

Respectfully submitted,

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